



# Aerospace Engineer



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Aerospace Engineer

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I develop procedures to make the job easier for air traffic controllers, and the skies safer for pilots and air travelers.

## Areas of expertise:

- Aerodynamics
- Space systems design
- Aeronautical engineering

## How I first became interested in this profession:

During the time when I was a police officer, I learned to fly. I had thought that becoming an airline pilot would be fun, but decided that designing and testing aircraft and spacecraft would be more exciting.

## What helped prepare me for this job:

Because I wanted to build planes, I took general courses in engineering. Working with a team of experts in different fields requires a general understanding of their specialized fields. The team members need to speak a common language, and to understand the "big picture" in order to come up with the best design possible. Learning to fly was of course important for me, but learning to communicate my ideas was just as important. Even if you have good ideas, you need to be able to express your ideas clearly in order to convince others to try them out.

## My role models or inspirations:

My parents taught me by their example that I can do anything I apply myself to, and that I can truly reach out and touch the stars.

## My education and training:

- Ph.D. candidate in Aeronautics and Astronautics, Stanford University
- M.S. in Engineering, Western Michigan University
- B.S. in Engineering, Western Michigan University

## My career path:

- Three years as an aerospace engineer at NASA Ames
- Six years in the Aeronautics and Astronautics Department, Stanford
- Three years as principal investigator at Western Michigan University
- Thirteen years as flight instructor
- Ten years as a police officer at East Lansing, Michigan

## What I like about my job:

I like getting paid for doing what I love best, thinking, and also dreaming about airplanes and outer space.

## What I don't like about my job:

I miss not getting to fly the airplanes, or to feel the controls and metal with my own hands, but I am happy to know that our research here at NASA is helping many other pilots to fly and land more safely, and the air traffic controllers to work with more reliable information.

## My advice to anyone interested in this occupation:

Learn to communicate and to work well with others. Languages are bridges and peepholes into other cultures, so try learning a foreign language! Have broad interests, and don't be afraid to try new things, or to fail at them. If you are willing to learn new skills, you don't have to spend your whole life working in the same field. "Today" can be changed; there is always tomorrow.